

Producer Focus Groups

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Introduction

Four focus groups were conducted at the following locations with the number of participants as identified:

- Marion, Iowa - August 24, 2000, five producers
- Denison, Iowa - August 28, 2000, two producers
- Webster City, Iowa - August 29, 2000, three producers
- Creston, Iowa - August 30, 2000, one producer

All of the participants were actively engaged in grain farming, ranging between 400 acres and 1500 acres. Some participants had livestock, while other participants did not. All of the participants at Webster City also were seed dealers.

Results by Focus Group

The focus groups were asked three questions concerning input management and environmental benefits in order to get their input on the type of demonstration/information from the production side of agriculture. Participants were asked to record their responses before beginning the discussion in order to give them time to think through the question. Participants verbalized their responses, and questions and discussions followed.

The individual sessions yield greater detail in answering the questions. Sometimes when answering a question, the participants posed a question and actually were requesting information. Endnotes have been created (in the individual session notes) to help keep track of those information requests, which could also become demonstration ideas.

Marion, Iowa - August 24, 2000

1. What aspects of agricultural input management (nutrient, pesticide, manure, tillage) offer the best opportunity (through change) for improvement in both economic efficiency of crop production and environmental benefits due to less pollutants lost to the environment?

- More efficient manure application
 - timing
 - credit for value against commercial input neededⁱ
 - application techniques
 - amounts – distribution benefits vs. transportation costs
 - need to transform manure into a form that moves more economically, i.e. changing from a liquid to a solidⁱⁱ

- Reducing tillage
 - Less or none
 - No-till improves the structure of the soil, encourages natural organisms to help soil, including earth worms, helps clean-up the run-off, and is good for all soil types and slopesⁱⁱⁱ
 - Increased use of buffer strips, especially grass strips next to streams^{iv}
 - Increased use of strip cropping, especially on upper level on slopes^v
- Positioning of crops
 - Based on slope (length and steepness), soil types, crop types for soil
 - Alternative striping to decrease water erosion
- Decreased pesticide use
 - Contact
 - Post applied where needed only
 - GMOs^{vi}
- Decreased herbicide use
 - New herbicides look safer because you use less of them (concentrated), but are they really better/safer?^{vii}
- Identifying localized point of water entering streams
 - Use of wetlands instead of buffer strips^{viii}
- Decreased use of nitrogen

2. *Who/what would make me change my fertilizer, herbicide, and pesticide amounts and application processes that would result in less pollutant lost to the environment?*

- Balance between agronomic and economic principles
 - Look at maximum economic yield (profit per acre) vs. maximum yield (bushels/acre)
 - Economic benefits to the producer - If research shows no-till will improve long-term economic benefit, then I'll change tomorrow! How about livestock and no-till – compaction problems?^{ix}
 - Need systems approach – takes money and time over long-term
 - Systems approach includes value-added opportunities, which takes venture capital.^x Farmers are producers not manufacturers, processing, marketing, and sales. It's hard enough to keep up with markets, let alone thinking about adding value and then marketing a new product. Right now the government is putting up barriers to value-added agriculture.
 - What gain does the farmer get now, if he uses environmentally friendly approaches? Need niche markets for grain that is produced using environmentally friendly approaches. Shouldn't society pay me to use fewer chemicals if it is going to benefit society in the long-term?^{xi}
- Balance between society and individual benefits – What benefits society might not benefit the individual producer.
- Site specific nutrient testing, GPS – grid basis
 - Difference between maintenance and building soil – when is enough, enough?^{xii}
 - What standards do we use?

- Who pays to start and maintain? – If it is a benefit to society (reduction of run-off), then shouldn't society have to pay? It's too expensive to justify at this time, especially if renting crop acres.
 - GOMs – It seems like we are using less chemicals and pesticides when using GMO's – Isn't that friendly to the environment over the long term?
 - Rotation options – We need a third crop for better rotation, stress off corn and soybeans, and to improve the environment – maybe industrial hemp?^{xiii}
3. ***What information/demonstration should our programs emphasize in order for you to make informed decision concerning fertilizer, herbicides, and pesticides use that would offer environmental benefits?***

- Find out where, how, and why we have water pollution? No one can tell me if I have water pollution or not. Am I better than my neighbor?
- Need proof – Is it economically feasible to do a new system like no-till? No-till requires a systemic approach, lots of knowledge, information, and practice. The problem is getting people to be interested; this requires a change of mind set. No-till needs to be promoted, especially to larger farmers. Many now say they no-till, but they really don't. It does require better equipment and better management. Longer term producers using no-till reap economic benefits, but must stay with no-till for longer time periods.
- Need to show large farmers (one that rent and lease) that it is economically feasible to be environmentally friendly. The large producers control a lot of land; concentrate on them!
- The research programs that are underway (i.e. Leopold Center) need to be longer term and the results need to get out to the farmer.
- Need comparisons of systems approach – including dollars for inputs, labor, equipment, management, and environmental monitoring. Right now the high yield producers with high inputs are not sustainable.
- Need a structure to relieve economic pressure – Economics drive production!
- Exchange of carbon credits – bad thing because it promotes pollution by larger companies
- Need a Web site
- Need a list-serve – one where we can register for specific information and emails are sent to us when research and information is posted – We don't have time to sift through all the research and find out what is happening.
- Right now information comes from (in order of influence):
 - suppliers
 - other farmers
 - farm magazines

NOTE: Most of the participants farmed tilled ground and, therefore, are interested in demonstrations and research done on tilled ground. The assumption is that manure, tillage, and chemical use will affect the environment differently on tilled ground versus untilled ground. For example, in times of flooding on tilled ground, where does the excess nitrogen go? Does it go into the ground water or is it carried through the tile to streams and rivers? Two out of the five participants were firm believers in no-till, with eight to ten years' experience each.

1. *What aspects of agricultural input management (nutrient, pesticide, manure, tillage) offer the best opportunity (through change) for improvement in both economic efficiency of crop production and environmental benefits due to less pollutants lost to the environment?*

- More efficient manure management, especially with larger confinement units
 - How do you measure amounts applied?
 - How do you monitor run-off and water quality? DNR is always reactive after spills occur; they need to be proactive.
- Tillage
 - No-till seems to be used less lately. In part there seems to be less rain, especially gully washers so the need for no-till is less.
 - Anhydrous use works the ground more, but like to put on in fall due to chance of wet spring. Then what? Is this economical? Is this efficient for the environment?^{xiv}
 - Need to continue advertising and promoting chemical can returns in late spring.^{xv}
- Chemical use has increased to the maximum of recommended rate so chemical companies will stand behind it.
 - Need chemical companies to stand behind lesser rates if suggested by scouting and soil tests^{xvi}
- Round-up ready beans decrease chemical costs and usage, so must be environmentally friendly.
- Fertilizer testing – Most producers around here do testing every few years and maybe should do a little more. Do the amount suggested by the service provider and then put on accordingly.

2. *Who/what would make me change my fertilizer, herbicide, and pesticide amounts and application processes that would result in less pollutants lost to the environment?*

- Economics, economics, economics – “Someone needs to show me I can profit by using lower rates.”
- GPS – for liming and it paid off. Soil samples every 2.5 acres every three to four years.
- Need to see test plots using different rates of chemicals and fertilizer.
 - Many questions if chemical and fertilizer companies run test plots.
 - Need to look at maximum economic yield – need economic data^{xvii}
 - Must be practical – useful – pragmatic
 - Problems when seed companies and chemical companies are the same. In the future we will be doing more contracting, i.e. high oil corn; but now we have problems with marketing. Like hogs, contracting seems to be good to some; and that’s OK.
 - Now we must rely on chemical companies to decrease rates because we have to use their rates for guarantees.
- Why are chemical prices lower in Canada?
- We can’t compete with foreign production with our price of land, etc.

3. ***What information/demonstration should our programs emphasize in order for you to make informed decision concerning fertilizer, herbicides, and pesticides use that would offer environmental benefits?***

- Test plots with big signs so you can read from the road all season.
 - Need summer meeting for explanation
 - Fall meeting and results posted
 - Local newspaper, the web, Iowa Farmer Today
- Class for applicator license – boring! “This is a missed opportunity for learning new techniques.” Some bring their own crossword puzzles and magazines to read. Seat time only. Forget about the lecture; we don’t learn that way.
 - could tie back to test plots
 - It would be a change to talk about what was learned
- How do test results get to the farmer? The farmers agreed on the need to get test results out.
 - Soybean Digest
 - Iowa Farmer Today
 - Not Extension office, although one does look at Elwynn Taylor on his computer.

NOTE: Both participants farmed non-tiled ground, and both had cattle and pasture acres. Both had and used computers and email. Younger farmers tend to use the computer more, especially if the wives are home. They used computer to check prices and elevator bids. Even though they can price through computer, they priced at the elevator.

Webster City, Iowa - August 29, 2000

1. ***What aspects of agricultural input management (nutrient, pesticide, manure, tillage) offer the best opportunity (through change) for improvement in both economic efficiency of crop production and environmental benefits due to less pollutants lost to the environment?***

- Grid sampling – GPS
 - All of these participants did grid sampling on the land they own: one on a yearly cycle, one on a biennial cycle, and the third on a three-year cycle, with grid ranging between 2.5 acres and 4.0 acres. They would like to see larger farmers on rented ground do this. They saved on lime (important over 4-5 years) and fertilizer. ^{xviii}
- Strip fertilization
- Nutrient stratification – on highly erodible land with minimum tillage or ridge tilling, what happens?
- Wet years- bad time for no-till, stirring up adds nitrogen by adding O₂ ^{xix}
- Manure management
 - Lagoon vs. under-facilities storage – which yields higher nitrogen levels? ^{xx} Most everyone around here does OK and are pretty sharp. The larger companies with confinement buildings have the personnel to handle waste management. Some concern whether they are over-applying. No way of knowing about run-off. ^{xxi}
- GMOs

- Round-up ready corn and beans decrease other chemicals that generally would carry-over. (They think that between 65% and 85% of beans planted were GMO's, and next year it will be 90%. No need for separation at elevator. As far as corn there is some separation at elevator for Round-up corn, except for Liberty, which was approved in Europe.)
- BT corn. There is concern over the Monarch butterfly. How about when Lorsban kills everything, lady bugs and all? DDT killed everything in 10-mile radius? Isn't this better because it is more specifically targeted? (90% of corn planted was BT because it is cheaper than spraying and no restrictions at elevator.) BT corn doesn't have molds that are toxic to people and animals.
- Yields same or increased – Need more research and more GMO's so will need fewer and fewer applied herbicides and pesticides.^{xxii}
- If you are feeding GMO crop, what does it hurt?^{xxiii} The consensus is that it probably doesn't hurt anything. In fact, these farmers viewed it as a "huge benefit to society at large." In their area, the "city people might make jokes but they know enough farmers to trust us."
- Education of kids coming out of larger schools about farming and agriculture.^{xxiv}

2. *Who/what would make me change my fertilizer, herbicide, and pesticide amounts and application processes that would result in less pollutants lost to the environment?*

- My service provider agronomist makes the recommendations and I "pretty much go with his recommendations."
- Economics, economics, economics
- Whatever would make me change must be revenue enhancing.
- I'm not going to listen to someone who hasn't farmed and just wants me to do it for society.
- The GPS system helped me see how I could reduce lime and fertilizer inputs and still have a good crop. GPS is based on economics, agronomists, and service providers.
- IPM newsletter and training session for custom applications license were good.
- Computer information: cybercrop.com, e-markets, dataline, weather records
 - Concerns that computer information takes time to sort through
 - 2 out of 3 used computer for information on a regular basis, but had different sites they used.^{xxv}

3. *What information/demonstration should our programs emphasize in order for you to make informed decision concerning fertilizer, herbicides, and pesticides use that would offer environmental benefits?*

- Screening programs for chemicals so producers are aware of the environmental reactions. Why are chemicals on the market before they know the environmental consequences?
- Ft. Dodge Answer Farm has good stuff and needs to be publicized on the web.
- Manure application
 - What rates work?
 - What spreader application yields what rates?
 - Should you add nitrogen to balance manure? When? How much?
 - Need demonstration plot to show profit of manure management.

- This is the last year that economic data is going to be considered for the Master Corn Growers – too expensive and too few people are interested.
- Need to press service provider for lowest rates. They want to sell you the highest rates and pressure you by saying guarantee are only good at highest rate application.
- Economic data – what makes the farmer the most money?
- Find a way to decrease tariffs and transportation costs. Farmers want to produce it, now someone needs to sell it.

NOTE: All of these participants were seed dealers. All of the land they farmed is tilled (some dating back to 1910) with irrigation under 1%. Earlier there was some experimentation with no till, but now none that they know of. The soil is too flat and black; however, there is some ridge till.

Two out of three had some livestock, basically hog confinement. Webster City area had lost its cattle base. Twenty years ago it was 35,000 head and now 2,000 head due to:

- Vertical integration
- Run out by DNR
- Packers left to more arid climates
- Finances/Economics
- Politics – especially the dairy buy-out

These participants thought that they were taking pretty good care of the soil and most of their friends and neighbors are aware of good environmental practices. “If we don’t take care of our soil, it won’t take care of us.”

They believed bigger farms do a good job if they have a good manager. There seem to be many farmers around the 2,000-acre mark, and a few of the larger farmers, up to 24,000 acres. So if you can reach one big farmer, it is the same as reaching a dozen smaller farmers.

90% of the seed customers have jobs off the farm, or their wives do. “Sad, but that’s the way it is.”

Creston, Iowa - August 30, 2000

1. What aspects of agricultural input management (nutrient, pesticide, manure, tillage) offer the best opportunity (through change) for improvement in both economic efficiency of crop production and environmental benefits due to less pollutants lost to the environment?

- Over applying of nutrients and pesticides
 - New research at Purdue discovered that the spraying system could reduce the chemical rates if you separate the application of water and chemicals, using a coarse water spray and a fine chemical spray. You could use one-half of the chemicals but it cost \$2500 to retrofit sprayer.
- Manure management
 - Many farmers don’t know or test the manure for nutrient content, or know the soil tests, or the spreading tons/acre.
 - Need to find some easy way to find out about spreader rates.^{xxvi}
- Tillage
 - No-till decline in last three years (read this in the paper and can see it in this area)

- Problem here is compaction due to cattle running on ground after frost is out in the spring. So, if it is an early wet spring, farmers do not no-till. If it is a dry spring, they no-till.
- Environmentally sound practices are hard to judge. No one tests the run-off water for chemicals or soil. Must judge by sight – gullies, etc.
- This farmer soil samples every three years. Last year did a grid sampling on 2.5 acres/samples. Saved enough money on lime and potash to pay for sampling. Won't use it for chemicals or fertilizer though, only for lime.^{xxvii}
- GPS available through co-op and would recommend it to others, especially for lime.

2. *Who/what would make me change my fertilizer, herbicide, and pesticide amounts and application processes that would result in less pollutant lost to the environment?*

- Right now, I would be hard pressed to change my practices. "I'm OK."
 - Apply nitrogen according to the rule of thumb.
 - Like pre-emergent chemical in beans, and atrazine & 2-4-D in corn.
- I do read and would change if I read something, like the Purdue research.
- Also, I talk with my service provider and will listen to his recommendations. He follows the service provider's recommendations so he would have the guarantee if he needed to respray (gets rebates on respraying of \$6.50/acre). This farmer had been a service provider and realizes that there are kickbacks to the dealers, so weighs his options carefully before changing his chemical application practices.
 - Using about the same fertilizer and chemicals overall – maybe more post-applied at recommended amounts.
- Does ask his Extension agent if he has a specific problem (but not on chemical or nutrient amounts and application rates). They might not know the answer but they can usually find someone to get the answer to him.

3. *What information/demonstration should our programs emphasize in order for you to make informed decision concerning fertilizer, herbicides, and pesticides use that would offer environmental benefits?*

- Manure – demonstrating on slurry wagons, ways to measure amounts/acre and determining nutrients.
- GPS field day – grid sampling
 - Last spring there was a meeting against grid sampling – cost too great and reliability not good.
 - Expense of GPS now doesn't outweigh benefits. Need to see more research on benefits. (This farmer has a yield monitor that works on unloading auger. It's not a grid system but he can tell pretty close on one part of the field vs. another part. He thinks it is just as good and uses some of that information the next spring. Has to rely on memory for accuracy.)
- Nutrient management – manure plus commercial fertilizer
 - importance of oil testing is not understood – must show economic benefit
 - Need to make emphasis on conservation – take care of nutrients and improve yield.
- Border strip effectiveness – incentives needed

- Relaxing restrictions on grazing, all winter especially next to corn strips.
- Need to get research out on compaction and grazing cornstalks. Jim Russell has done work here through Leopold Center.
- Information on how to use future markets for hedging– not speculating. The younger farmers especially need to know how to use it and the methods for using it.
- Research on “complete employment” of farmers due to livestock vs. under-employment of grain farmers only. How to stay busy all year and make money, not counting on government for check on grain cropping only. The answers are outside of the government. LDP increases problems. Need to explore alternative policies.
- GMO research needs to be done, especially on building up resistance. Now there is volunteer corn in the beans that is Round Up resistant.
- Need to work with European markets to get approved so GMOs don’t hurt export markets. The example is Liberty-link corn and STS soybeans. There is a \$.25/bu GMO-free incentive. Wallace Foundation is trying to enhance the market value using contracts with various companies to get grain premiums. More research needs to be done:
 - Conventional vs. Synchrony
 - Conventional vs. RR beans
 - Neighbor to neighbor problems – can’t guaranteed GMO FREE corn if next to neighbor with RR corn

NOTE: This participant was on the Leopold Issue Team for Livestock and the FSA Committee. He farmed about 800 acres with 400 acres of row crop and is 64 years old. He had a computer but is not on the Internet because he hasn’t run a cable to his house, yet. His estimate was that 30-40% of the farmers are on the Internet and use it. He did frequent the Extension office (his daughter works for Chips).

Summary

Please note that a true focus group should be a minimum of four participants; and fewer than four participants were involved in each of the groups at Denison, Webster City, and Creston. However, when the groups’ comments are combined, they yield useable information. The findings are summarized below.

1. What aspects of agricultural input management (nutrient, pesticide, manure, tillage) offer the best opportunity (through change) for improvement in both economic efficiency of crop production and environmental benefits due to less pollutants lost to the environment?

- More efficient manure management, especially with larger confinement units
- Tillage, especially about no-till which seems to be decreasing throughout the state
- GMO’s for decreased chemical and pesticide use
- Decreased use of nitrogen, chemicals, and pesticides (must use recommended rates for service providers to guarantee results)
- GPS service to better manage input needs according to the site
- Education of the general public to let them know that farmers are working towards environmental benefits

2. *Who/what would make me change my fertilizer, herbicide, and pesticide amounts and application processes that would result in less pollutants lost to the environment?*

- Economics, economics, economics – “Someone needs to show me I can profit by using lower rates.”
- Balance between society and individual benefits. Farmers don’t purposefully pollute or damage the environment. However, they must stay economically viable.
- My service producer and/or agronomist make the recommendations and the guarantees and I follow them. If service providers would stand behind reduced amounts, farmers would use reduced amounts.
- GPS – pinpointing where specific amounts of nutrients and chemicals are needed. For several of the producers, GPS already has been economically feasible for liming. GPS use needs to be expanded. Once again the benefits have to outweigh the costs.
- Research, for example Leopold, Purdue, Wallace Foundation
- New products, such as GMO crops that need less chemicals and inputs

3. *What information/demonstration should our programs emphasize in order for you to make informed decision concerning fertilizer, herbicides, and pesticides use that would offer environmental benefits?*

- Non-till economic benefits
- Manure economic benefits
- Find out where, how, and why there is water pollution.
- Demonstrations tailored for large farmers, especially those who rent large amounts of land
- Comparisons of system approaches, with and without livestock
- More research on GMO crops
 - OK for export markets
 - Resistance tolerance of pests
 - Impact on environment compared to use of other chemicals and pesticides
- Redesign Custom Applicator classes so they are updated with the latest research and demonstration results.
- Create a website that links with research that is being done.
- Create a list-serve that I can sign up for to send me the research that pertains to my farming type, soil type, and livestock needs.
- Results need to be better published, especially locally

One thing became very evident when viewing the macro picture: Iowa has different farming practices and the research needs should be site specific for the soil types and tillage practices. A second aspect to be considered is the livestock practices, including whether there is pasture or confinement operations. The matrix below may be useful in determining research and demonstration needs.

Livestock -> Soil/tillage (below)	No livestock	Livestock on pasture	Confinement livestock
Tilled without tile			
Tiled			
No-till			

Endnotes

ⁱ Credit for value against commercial input needed – What kind of return (\$/unit of nitrogen) from manure is there?

ⁱⁱ need to transform manure into a form that moves more economically, i.e. changing from a liquid to a solid

ⁱⁱⁱ No tillage improves the structure of the soil, encourages natural organisms to help soil, including earth worms, helps clean-up the run-off, and is good for all soil types and slopes

^{iv} Increased use of buffer strips, especially grass strips next to streams

^v Increased use of strip cropping, especially on upper level on slopes

^{vi} GMO's

^{vii} New herbicides look safer because you use less of them (concentrated), but are they really better/safer?

^{viii} Use of wetlands instead of buffer strips

^{ix} Economic benefits to the producer - If research shows no-till will improve long-term economic benefit, then I'll change tomorrow! How about livestock and no-till – compaction problems?

^x Systems approach includes value-added opportunities which takes venture capital

^{xi} Shouldn't society pay me to use fewer chemicals if it is going to benefit society in the long-term?

^{xii} Difference between maintenance and building soil – when is enough, enough?

^{xiii} Rotation options – We need a third crop for better rotation, stress off corn and soybeans, and to improve the environment – maybe industrial hemp?

^{xiv} Anhydrous use works the ground more, but like to put on in fall due to chance of wet spring. Then what? Is this economical? Efficient for the environment?

^{xv} Need to continue advertising and promoting chemical can returns in late spring.

^{xvi} Need chemical companies to stand behind lesser rates if suggested by scouting and soil tests

^{xvii} Need to look at maximum economic yield – need economic data

^{xviii} When the weather changes from too much rain to too little rain, will the GPS fertilization system provide enough fertilizer for dry spots? For example, in a dry year if you increase the application for high spots and decrease for low spots, then will there be enough in case there is a wet year and your sandy soil has the opportunity to do better?

^{xix} Wet years- bad time for no-till, stirring up adds nitrogen by adding O₂

^{xx} Lagoon vs. under-facilities storage – which yields higher nitrogen levels?

^{xxi} No way of knowing about run-off – manure management

^{xxii} Need more research and more GMO's so will need fewer and fewer applied herbicides and pesticides.

^{xxiii} If you are feeding GMO crop, what does it hurt?

^{xxiv} Education of kids coming out of larger schools about farming and agriculture.

^{xxv} 2 out of 3 used computer for information on a regular basis, but had different sites they used. Agreed that a web-site and list-serve makes good sense and they would sign up for it.

^{xxvi} Need to find some easy way to find out about spreader rates.

^{xxvii} Won't use GPS for chemicals or fertilizer though, only for lime. So, once you have the grid samples done, why not use for other uses, other than lime?